

DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
YELLOWSTONE NATIONAL PARK  
YELLOWSTONE PARK, WYO.

OFFICE OF THE SUPERINTENDENT

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MONTHLY REPORT

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MONTHLY REPORT,

1920.

January.

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# DEPARTMENT OF THE INTERIOR

## NATIONAL PARK SERVICE

### YELLOWSTONE NATIONAL PARK

YELLOWSTONE PARK, WYO.

OFFICE OF THE SUPERINTENDENT

February 9, 1920.

The Director,  
National Park Service,  
Department of the Interior,  
Washington, D. C.

Sir:

The following is my report on conditions in Yellowstone National Park and on the operation of the park for the month of January, 1920:

#### GENERAL CONDITIONS:

January being mild with unusually light snowfall, much relief was afforded from the almost unprecedented winter conditions of November and December.

With the exception of 1896 and 1914 the month was the warmest January since the beginning of the record in 1887. The temperature was below zero on three days only during the month: the lowest, -11 degrees, occurred in the cold wave of the 8th and 9th, which was of short duration.

Light snows occurred on several days but the total fall was only 2.9 inches, which is the least total for January in 33 years' record. There was considerable melting of the snow, but an average of 8.6 inches of compact snow remained on the ground at the close of the month.

No storms of consequence occurred and taking the month as a whole it may be considered one of the most pleasant midwinter months of which there is record.

The monthly Meteorological Summary furnished by the Weather Bureau, is inclosed herewith. The depth of snow at various points in the park at the end of January was as follows:

Mammoth	8.6 inches.
Gallatin	27.3 "
Riverside	30.0 "
Lake	34.5 "
Sylvan Pass	37.0 "
Snake River	49.0 "
Buffalo Farm	14.5 "
Tower Falls	20.0 "
Canyon	50.0 "
Norris	20.0 "

Due to considerable thawing weather in January, this snow is quite compact, and has a greater water content than usual for this date.

### Travel.

The only roads open to travel other than by snowshoes and skis were the one to Gardiner from Headquarters, which was in good condition for truck motor traffic throughout the month, and from Mammoth to Cooke, via Tower Falls, which was used for sleighs throughout the month by Mr. Frank Lind, who has the contract for carrying the mail to Cooke, and his employees. As there was scarcely any new snowfall during the month, this road became well packed, and was in much better condition for travel than usual in January. Trucks were used during the entire month for hauling freight from Gardiner to Headquarters, and for hauling hay from ranches north of the park for feeding the wild animals.

Daily train service was maintained to Gardiner over the park branch of the Northern Pacific Railroad, except on January 19th, when the track was blocked by the regular train getting off the track at the west end of the yards in Gardiner, on account of the spreading of the rails. No mail was received on that date.

As will be noted by the inclosed copy of the Chief Ranger's Report for January, the travel to the park was limited to 9 people who entered from Gardiner to see the wild animals. This does not include a few people who came in to Mammoth on business, whose names are listed separately in this report.

### Labor and Supply Market.

Everything being on a winter basis in the park, no demand existed for labor, and but little for supplies. Three carloads of coal were received from the mines, at the same prices as paid last fall and under the same contract. These were unloaded and hauled to Mammoth by our regular employees. Three carloads of excellent sawdust were purchased at \$40 per car, f. o. b. Drummond, Montana, shipped to Gardiner and hauled to Mammoth and placed on the ice stored for next summer's use.

The coal shortage at Gardiner was finally relieved by the shipping in of coal from Montana mines by local dealers, and the work of opening up the mine in the park about one mile south of Gardiner has been discontinued. But little relief was secured by opening this mine, as it was only opened for a little over *very little* feet and the coal taken out was nothing but surface coal, though it improved as the tunnel progressed

back towards the mountain. But towards the end the walls began to move, due to the fact that it was all in a slide and we had an extended period of thawing weather, and the men at work regarded it as a dangerous proposition. This work, however, demonstrated the fact that the chances are excellent that there are some good veins of coal in the vicinity, and it is not unlikely that they could be opened up and worked to an advantage to the park concessioners and this office.

## II. PERSONNEL.

### Employees.

On January 1st there were 57 employees under this office; on January 31st there were 55. Below is given a list of the number of various classes of employees serving under appointment, with general statement of the kind of work performed by each class:

<u>No.</u>	<u>Class.</u>	<u>Kind of work performed.</u>
1	Asst. Engineer	Office Engineering.
1	Blacksmith	General Blacksmith work.
5	Clerks	1 Disbursing Agent and purchasing clerk; 1 on orders, proposals, and vouchers; 1 stenographer, files and revenues; 1 on payrolls and time-keeping; 1 on cost accounting and in charge of storehouse.
1	Steward & Master of Transportation	In charge of all transportation.
3	Electricians	1 in charge of power plant; 2 assistants in power plant.
1	Buffalo Keeper	In charge of tame buffalo herd.
1	Asst. Buffalo Kepr.	assisting buffalo keeper.
1	Foreman	In charge of stables.
1	Gen. Foreman	In charge of construction crew.
1	Handyman	Work in commissary, rationing crews, etc.



<u>No.</u>	<u>Class.</u>	<u>Kind of work performed.</u>
1	Linenman	In charge of telephone system; did emergency work and installed instruments.
1	Watchman	Watchman at Headquarters.
1	Master Mechanic	In charge of shops
1	Mechanic	In charge of auto and truck repairs.
1	Plumber	In charge of general plumbing at Headquarters.
1	Painter	In charge of general painting at Headquarters.
1	Telegraph Opr.	Telegraph and switchboard (telephone) operator.
1	Telephone Opr./	Telephone switchboard operator.
1	Laborer	Miscellaneous work at Headquarters.
1	Chief Ranger	In charge of Ranger Force.
3	Asst. Chf. Rangers.	Assisting Chief Ranger.
6	1st class park rangers.	(In charge of ranger stations, on duty on the office of Chief Ranger; on patrol duty protecting wild
18	Park Rangers	( animals; feeding wild animals.

In addition to the regular employees mentioned above, the following list of temporary laborers, teamsters, etc., were employed:

	<u>On Jan. 1st.</u>	<u>On Jan. 31st.</u>
Engineer	1	1
Teamster	1	1
Laborer	1	0
	<u>3</u>	<u>2</u>

#### Leaves of absence.

During January annual leave was granted as follows:



4 days.

to 31; 5 days.

5.

days.

4; 2 days.

at \$1,500 per  
\$1,320 per annum.

service during the

ARRIVING 12,

January, 1920. Yellowstone National Park Employees.

1 Assistant Chief Ranger.

### III. WORK COMPLETED.

#### (a) Construction of Physical Improvements.

No construction work was done during the month, as all work is on a winter basis.

#### (b) Maintenance and Repair of Physical Improvements.

As winter weather conditions prevailed in the park during the month no maintenance work on roads was attempted.

The work of remodeling the old frame stable #47, which is to be used as a shelter for road machinery is finished, and the man engaged on that work is now building a partition near the south end of the garage to provide a separate room for a motorcycle garage and shop. The small crew remaining in the shop and garage was further depleted during the month by sickness and vacations, and the fact that those remaining at work were required to assist in cutting ice, hauling coal and other duties, the result is that little or nothing was accomplished in the way of making repairs to tools and machinery.

One man remained in the engineer office. His work consisted principally of cataloguing and indexing blue prints and field books, and making plans for proposed work to be done the coming summer.

The work of putting up a supply of ice at Mammoth for

W. H. Pendell, clerk, 11 to 17; 6 days.  
George T. Dustman, park ranger, 10 to 14; 4 days.  
Lewis L. Hill, foreman, 1 to 15; 12 days.  
W. K. Kelley, assistant buffalo keeper, 29 to 31; 3 days.  
J. H. Purdue, park ranger, 25 to 31; 6 days.  
Frank L. Flawlee, blacksmith, 15 to 24; 9 days.  
Bert L. Stinnett, master mechanic, 23 to 24; 2 days.

#### Appointments.

James McBride, appointed Chief Ranger at \$1,500 per annum; promoted from Assistant Chief Ranger at \$1,320 per annum.

#### Separations.

There were no separations from the service during the month of January.

#### Vacancies.

1 Assistant Chief Ranger.

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The work of putting up a supply of ice at Mammoth for



next summer's use was completed on January 15. A total of 779.1 tons were put up, of which 232 tons were placed in our ice houses; 351.2 tons went to the Hotel Company; 194.3 to the Camping Company; 11.6 to George Whittaker, and 9.6 to the Park Curio Shop. The work was done by a crew working jointly under the direction of General Foreman Small, each interest bearing its share of the expense in proportion to the amount of ice for each one. The total cost of cutting the ice, hauling it  $3/4$  of a mile and packing it in the houses was \$1.57 per ton.

#### Improvements by Concessioners.

The Yellowstone Park Camping Company had one mechanic at work with a helper overhauling its motor transportation.

The Yellowstone Park Hotel Company employed a carpenter and helper most of the month remodeling a building for use of the Hotels, Camps and Government as an ice house at Mammoth. This work, which was completed at the end of January, consisted in making alterations to a frame building which had formerly been used as a grain shed, by tearing out the floor, putting in a double lining with building paper between the two linings, making double doors in three places where simple slide doors were formerly in use, and adding double doors on the end, and in two places on the opposite side from the regular doors at convenient intervals for putting up ice; building two single partitions to divide the space for the various interests, and making one double partition lined with paper to separate the ice compartments from the balance of the building which is still in use as a storehouse for grain. Also making and placing on the roof four ventilators, properly spaced to provide good ventilation for the ice, and giving the doors and ventilators a priming coat of red paint to make them look like the balance of the building. The part of this building so remodeled is 21 feet wide, 105 feet long, about 12 feet high to the plates, and has a capacity of 750 tons of ice. A photograph showing these modifications to the building is inclosed. This work cost the Hotel Company about \$71.84. Most of the lumber used was reclaimed from their old ice house, and other old buildings being changed or demolished.

The Yellowstone Park Transportation Company made no improvements, and had but one man in its employ, who ran the regular stage which carries the mail between Mammoth and Gardiner. That Company received and unloaded one carload of baled hay at Gardiner, and hauled it to Mammoth with the mail stage. They have found it advisable to keep up a team of horses, for use in case storms are

heavy enough to prevent traveling over the road to Gardiner with a motor car.

#### (d) Service to the Public.

Due to the scarcity of visitors at this time of the year, this feature of our service is unimportant.

#### IV. WORK IN PROGRESS.

The Camping Company has three men employed at Mammoth, caring for the buildings, overhauling motor transportation, and doing odd jobs that can be done in winter. They also have one carpenter employed building benches, etc., in the shop, for next season's use around the camps.

The Yellowstone Park Transportation Company has one man employed permanently, who runs the automobile or wagon which hauls the mail between Gardiner and Mammoth, and looks after the buildings. He is also charged with feeding of hay to the Company's saddle horses (25 in number) which were brought in from the winter range on February 3, as they were starving to death on the range. Beginning since February 1st this company has employed a carpenter and two helpers, who are engaged in changing the cornice of the bunk house from stucco to shingles, to match the garage, which was changed in December.

Our shop force and other regular employees are engaged in overhauling motor transportation, road graders and other heavy road equipment, repairing small tools for next season's use, repairing harness and tentage, and remodeling one side of our shop building to provide a special shop for overhauling motorcycles, and to provide additional room in the shop where motor trucks and cars are repaired and overhauled.

The ranger force is continuing regular patrols, and one ranger is still assigned to the protection of the Gallatin Game Preserve. Two rangers are devoting their time to trapping and hunting wolves and coyotes; seven and one assistant chief ranger are still on duty with three trucks and two teams hauling hay for the wild animals, from ranches near Gardiner, and feeding it near the north entrance, and one ranger is engaged with a team at Headquarters feeding elk near the power plant and feeding the surplus horses which are being wintered here. Ranger Skinner continues on his important work of collecting specimens for the proposed museum, as well as furnishing photographs and special scientific

data for various purposes when called upon to do so.

The buffalo keeper and his assistant are engaged in caring for and feeding hay to the buffalo at the farm on Lamar River.

#### V. WORK BEGUN.

No new work was begun during the past month.

#### VI. PLANS OR PROPOSED WORK.

No new work is contemplated for the month of February, but it is intended to continue the work in progress, namely: overhauling trucks and motor cars, and the 75-horse-power FOLTE caterpillar tractor, and repairing tools and road equipment, by the shop force. Making and repairing signs, painting motor vehicles, and doing some work inside of buildings in the way of renovating, painting and kalsomining by the painter. Finishing the work of altering the partitions in the garage to provide for a motor-cycle repair shop and to provide additional room for the work shop for overhauling motors, by Mr. Small, and continuing the work of sorting out unserviceable property and listing same for condemnation, and moving and rearranging the storeroom, by the property clerks. The rangers will continue the regular patrols, including the work of one ranger patrolling outside of the park in the Gallatin Game Preserve, and also the special work of caring for the wild animals, including elk, deer, mountain sheep and antelope that are wintering and being fed near the northern entrance.

#### VII. POLICIES.

No new policies were adopted during the month.

#### VIII. COST OF OPERATION.

Cost reports for the month of January are inclosed herewith, and consist principally of salaries of regular employees on a winter basis.

#### IX. OTHER MATTERS OF INTEREST.

##### Wild Animals.

The mild weather and slight snowfall was a most welcome change from the severe weather of the early winter, and gives our deer, mountain sheep, antelope, and large herds of elk, which are



Time  
See Page 7

wintering on both sides of the north line of the park, a good chance to get through the winter without the serious loss predicted. Notwithstanding this fact, however, the scarcity of feed on the range rendered it necessary to continue the feeding of hay, and two trucks and two teams, with seven rangers and one assistant chief ranger, were so engaged throughout the month, working every day. A total of 311 tons of hay were hauled and fed during the month, from the supply purchased for the purpose last fall in stack near the north line, and at the beginning of the month they were feeding 3,000 to 4,000 elk, about 75 deer, and 250 antelope. As the weather moderated towards the middle of the month, many of these animals went back to higher ground and did not come in for feed, and the number of elk on the feeding grounds diminished to about 1,500 at the end of the month. Ranger Lawson also continued the daily feeding from Headquarters of 20 bales of hay a day to the herd of elk near the power plant, but this herd also dwindled from about 1,200 the first of the month, to 300 or 400 at the end of the month, they also drawing back towards higher ground.

This condition of the elk and other game moving back was not confined to these two herds, but was noticeable among all of the herds, both inside and outside of the park. While all indications point to an early spring, there is nothing sure about this, and we are taking steps to secure quotations on additional hay for feeding the game, which will have to be purchased should we get more bad weather or a very late spring.

Buffalo, wild herd: Rangers Iness and Frazier from Lake Station report seeing 61 of the wild buffalo in the Pelican Valley during the month, of which 9 were last year's calves. The adults were in excellent condition, but the calves were poor and it is doubtful if all of them will winter.

Buffalo, tame herd: At the end of December this herd numbered 412 animals. One bull calf died at the mouth of Bear Creek, from a general poor condition of health; one cow died near the same place as she was in poor condition, due to an injury to stifle; one old bull died in the Yellowstone River canyon near Knowles Cabin, and another old bull died on the same river, below Knowles Cabin, both from old age, so far as the rangers who reported it could determine, and one 6-year-old bull was shipped, crated, by express to Aurora, Illinois, on January 31, under authority dated January 16th. This leaves 407 animals in the herd. Of these 384 were at the buffalo farm on Lamar River where they were fed 64 tons of hay, and the balance, which were old bulls, were scattered in small numbers several miles away from the farm.



My statement in last monthly report to the effect that the herd had been taken to Slough Creek to be fed was erroneous. Chief Ranger McBride told me they would be taken there but later, after talking to the Buffalo Keeper, Lacombe, they decided not to take them there until later in the spring, so they fed at the Lamar River all the month of December. Aside from the animals that died, the others are reported to be in fair condition.

Bears: No bears were seen and it is doubtful if any of them have come out of winter quarters, though vague reports have been heard that they have been seen lower down the valley of the Yellowstone, outside of the park.

Antelope: The antelope were fed daily, with the elk, near the northern entrance, but the warm weather also had its effects upon them and they did not care much for the hay. The rangers report 250 in the bunch being fed inside of the park. Ranger Reese, who was stationed in the Gallatin Game Preserve just outside of the park on the west side of the Yellowstone River, reports 84 antelope outside of the park in his district. One dead antelope was noted close to the entrance arch near Gardiner.

Deer: The deer scattered on account of the warmer weather, even more than did the other animals. But about 15 fed with the elk near the power plant, but quite a number of others are located around the dwellings at Headquarters, where they are fed from the hand and help themselves at the stables. The January reports indicate that about 75 were fed with the elk at Gardiner, and Ranger Reese reported 154 wintering in his district, just outside of the park west of the Yellowstone River, between Gardiner and Corwin Hot Springs. A few days ago the rangers hauling hay from a ranch down the Yellowstone on the east side, met three of our whitetailed deer, which are very scarce, traveling down the road several miles below the park line. They tried to call them back, but without success, and the last heard of them they were nearly at Dome Mountain and still going. What causes them to leave is a question, but I am beginning to think that the presence of such large herds of elk on their old feeding grounds near Mammoth and on to Gardiner, caused by feeding hay here to the elk, is driving the deer, antelope and sheep to seek other ranges. While the elk do not seem to molest them particularly, they are so much larger and more numerous that I fancy the smaller and more delicate animals do not enjoy their company and eventually leave.

Elk: With the moderation of the weather, continued

throughout the month, the situation as regards the possible heavy loss of elk has improved wonderfully, and if the spring comes reasonably early, as indicated at present by all signs, we hope for a slight loss only. At the beginning of the month, about the usual number were being fed at Mammoth and Gardiner, but as the weather got warmer, they began to find feed in the foothills, and began going back, until at the end of January there were not over 1,500 taking hay at Gardiner. The condition of these animals is fair, except that quite a number of the calves appear to be getting weak, and quite a number have died, even those that have been at the feeding grounds all winter, and the reasons for this are doubtful. While the elk were scattered during January more than they were in December and therefore not easy to count, there is no reason why the numbers should be very much less, as not a great number have died. From all reports received, it appears that those at the feeding grounds are in no better condition than are those higher up in the park, and those that are wintering outside in the Absaroka National Forest, and the Gallatin Game Preserve close to the park line. The total number of elk found dead during the month near the feeding grounds at Gardiner and Mammoth was 122, of which six were killed while catching elk for shipment. Of these 98 were calves, 20 cows, and 4 bulls. The older animals were mostly in bad condition because of their age. Most of the calves that died appeared to be in fairly good flesh, and the cause of their death is uncertain. Some think they eat too much alfalfa and that the salt which some of the ranchers put with it when stacking cause the calves to become thirsty and they drink too much water and become chilled or sick immediately after drinking. I am inclined to think that one of the main causes of their death is the fact that they lose their mothers on the hunting ground, or otherwise, and miss their care through their first hard winter. The dead animals were hauled away where they cannot be seen, by the rangers with the hay trucks.

An estimate of the number of elk that spent most of the month of January outside of the park on the west side of the Yellowstone River is 700 to 1,000 head, and these appear to be finding plenty to eat, though they have been more or less of a nuisance to the ranchers on that side of the river, tearing down their fences and eating their hay, and have also interfered with our stacks that were purchased for them, in several instances. One park ranger was stationed at Electric, to patrol this part of the game preserve, during the month, and the deputies of the State of Montana also spent some time patrolling there. This ranger reported having found 17 dead elk in this district during the month, all of which had died of gunshot wounds, probably received during the hunting



season when they were on the opposite side of the river, as they cross back and forth frequently.

As to the elk outside of the park east of the Yellowstone River. This range has the undivided attention of six forest rangers who are stationed at proper intervals to cover the country from the park line to Carbella. Chief Ranger McBride, Assistant Chief Ranger Harry Trischman, and Park Ranger Dupuis, spent the last week of January patrolling this country and came back with the report that they saw 1,678 elk in good condition, and that they found 199 dead ones, all of which had died as a result of gunshot wounds, probably received during the open season when hunters were plentiful in that district. They did not find a single elk that had died on account of the hard winter; also that all elk were moving up higher on account of the mild weather, and many were returning to the park. A recent report from Mr. Ernest Shaw, Supervisor of the Absaroka National Forest, whose office is in Livingston, and with whom we are cooperating in the protection of the elk outside of the park, states that he gets reports from his rangers indicating that on the last day of January there were approximately 1,350 head of elk on the area from Bear Creek to Six Mile, but that this number was being reduced by the elk drifting south into the park. Also that his reports indicate there are about 1,000 head on the west side of the river, which is about in accordance with the reports received by us. All reports of the elk on the outside indicate that they are well scattered in small bands over the area and are apparently getting good feed at the present time. I saw a rancher from Cinnabar Basin two or three days since, who told me there were two or three hundred on his side of Cinnabar Mountain, higher up on the mountains than the domestic cattle ever went, and that the feed was good up there.

Gallatin Elk Herd: All reports that are received indicate that this small herd is wintering well and is still in good condition with prospects of but little loss.

The rangers at Riverside Station report for the month that they saw 70 elk along the Madison River, and that all but two old bulls were in good condition.

Southern herd: I learned from Mr. W. S. Henderson, Assistant Chief of the United States Biological Survey, who visited the park Feb. 2-4, and who has just returned from the Jackson Hole country, that the elk situation there had cleared up and that everything was looking in good condition - better than ours he thought. His reports were also corroborated by a letter received from the State Game Warden of Wyoming dated January 24, in which

he tells me that the conditions over the State of Wyoming are not so bad as indicated in previous reports - especially in the newspapers. That he is feeding from 4,000 to 5,000 elk in the Jackson Hole country, 1,500 to 2,000 on the head of Wind River, about 250 in the Shell Creek country, about 200 head near Buffalo, about 200 in Medicine Bow Range country, and was making arrangements to feed from 700 to 800 in the Dags River Preserve. That to date their loss has been confined to a few calves and some very old animals, and that if the mild weather continues the loss will be light. Also that other game is doing fine.

Shipment of elk: A total of 210 elk - 188 females and 22 males - were shipped from the park during the month of January as follows:

200 to Rocky Mountains Park of Canada, Banff, Canada, by express in four carloads on January 20, under authority of January 6, 1920. Mr. Howard Sibbald, Chief Game Warden of the Canadian Parks came after these animals and was assisted by Mr. Howard Eaton who has had much experience in handling for shipment cattle and wild animals. Mostly animals coming two years old were selected for this trip, and I have heard from the park superintendent to the effect that 195 reached their destination alive. Inasmuch as this was a Government shipment, we assisted Mr. Sibbald in catching them and loading, in every way practicable, resulting in a considerable saving in cost to his Government.

January 21 to Board of Park Commissioners, Minneapolis, Minn., one 5-year-old bull and one 3-year-old cow, under authority January 12. These were reported to be in fine condition when received. They were shipped by express, crated.

To President Bizzell, Agricultural and Mechanical College of Texas, College Station, Texas, on January 21, a 2-year-old bull and two 1-year-old cows, under authority of January 6.

To the City of Aurora, Illinois, four cows 2 to 3 years old, by express, crated, on January 23, under authority January 16. One of these cows escaped from the crate in Livingston, Montana, and returned to the range. She was replaced by another cow shipped January 26.

Mountain Sheep: A total of 107 mountain sheep were seen during the month, of which 53 were found north of the Yellowstone River, and 54 on the south side of the river. Those that frequent the Gardiner Canyon were not in evidence during the month, as they usually go back on Mt. Everts when the weather is mild.



Moose: Rangers Winess and Frazier saw 8 moose on one of their trips on skis to the Upper Yellowstone. The rangers at Riverside Station reported seeing signs of moose during their trips in their district.

Carnivorous Animals: Complaints of depredations by wolves and coyotes were not numerous during the month. Two Rangers, Anderson and Dewing, devoted most of their time to hunting, trapping and poisoning these animals, but their scarcity is indicated by the fact that they together killed but 14 coyotes, 3 wolves and 1 fox during the month. Two of the wolves and about half of the coyotes killed were females. Ranger Dewing reports recently that the elk are working into the district around Tower Falls and Soda Butte recently, and that the coyotes are following them in and he expects better results.

#### Grazing.

The warm weather has uncovered considerable forage and made it available for the elk and other animals. I have had several reports that it had been noted that grass has started in several places, but it is hardly credible that this will happen to an extent to do any good for several weeks to come.

The Yellowstone Park Transportation Company's agent in the park informed me that he found the company's saddle horses which they use in the park in summer, starving to death on their winter feed grounds which they had hit in the Yellowstone Valley, and he was obliged to bring them to Mammoth and feed them hay for the balance of the winter.

#### Birds.

Ducks are quite in evidence on Gardiner River. Clarke Crows and Dippers (Water Ousels) are also seen daily. The latter are seen along the Gardiner River, and have been singing for several weeks, indicating that they are nesting or preparing to nest soon.

#### Fish.

A few fish were taken in the warm water of Gardiner River during the month, by residents, and a few whitefish were taken by Gardiner residents near the mouth of the Gardiner, in the Yellowstone River.

#### Protection of Game.

The usual patrols were made by rangers on stations, and special patrols were made in the Absaroka National Forest adjoining the park, as indicated previously in this report. One ranger was stationed at Electric, Montana, to assist the State authorities in patrolling the game preserve on the west side of the Yellowstone River.

#### Arrests and Violations of the Law.

No arrests were made, and no violation of regulations reported, during the month of January. United States Commissioner John W. Meldrum left on January 15th for a vacation, but keeps me informed of his address and will return to the park on short notice if an arrest is made requiring a trial in court.

#### Special Visitors.

The following named special visitors visited the park during January, namely:

Mr. R. W. Bodley, Supervisor of the Gallatin National Forest, Mr. Ernest Shaw, Supervisor of the Absaroka National Forest, and Forest Ranger McLean, all on January 22d in connection with our co-operative arrangements to care for the elk herds outside of the park.

Mr. A. J. Gruner, of Miles City, Montana, and Mr. Victor Lee, of Edgewater, So. Dak., on January 16th, in connection with their proposed contract to haul freight through the park for mine owners of Cooke, Montana.

Mr. Howard Hibbald, Chief Game Warden of the Canadian National Parks, and Mr. Howard Eaton, of Id., yo., January 15 to 20, in connection with the capture and shipment of 200 elk to Banff, Canada, for the Rocky Mountains National Park.

Mr. Howard Hays, General Manager of the Yellowstone Park Camping Company, on January 17 and 18, in the interests of his company.

Madames L.K. Pryor and Elizabeth Frischman, owners of the Park Curio Shop, left the park on January 4 for Great Falls, Montana, and Denver, Colorado.

#### Motion Pictures.

Representatives of motion picture corporations operated in the park during January as follows:

<u>Permit No.</u>	<u>Date of Authority</u>	<u>Name</u>	<u>and</u>	<u>Address</u>	<u>In Park</u>
	1920				
	Jan.2	F. L. Piscock	of	Cody, Wyo.	Jan.1
		for			to
		Fox Film Corporation		New York	Jan.6
	Jan.6	L. G. Lucier	of	Lowell, Wyo.	Jan.6
		for			to
		International Film Service, N.Y.			Jan.19
	Jan.7	Jesse G. Sill		Portland,	Jan.6
		for		Idaho.	to
		Adventure Scenic Corporation,			Jan.31

Authority in each of these cases was given by you by wire, and permits were made out here, accepted by the permittees, and forwarded to you for approval. The permit numbers cannot be given above, as notice of the approval and numbers given each permit has not been received.

An interesting fact in connection with the visit of Mr. Sill is that he desired to get pictures of a mountain lion hunt, but several attempts to do so failed for the reason that neither his guide, Steve Elkins, who has an excellent pack of hounds and is experienced in hunting lions, nor our rangers, were able to locate any lions in the park, indicating that they are scarcer in the park than usual.

#### Miscellaneous.

Yellowstone Lake froze over on December 1. This data was omitted from my report for December, 1919.

Entertainments. Picture shows were held weekly at head quarters, on Saturday evenings, under a co-operative arrangement between park employees and the residents of Gardiner, Montana. No admission fees were charged.

Religious Services. Church services were held every second Sunday in the Chapel, by Rev. J. B. Hitchard, Episcopal minister from Emigrant, Montana. Christian Science readings were held each Sunday afternoon, at 1:30 o'clock.

Census. A census of the park was taken during January, by one of our clerks, Mr. C. C. Bauer, operating under the direction



of the United States Census Bureau. There are 165 people residing in the park, of which 116 reside at Mammoth Hot Springs.

Change in Status of town at eastern entrance. The small village located at the western entrance to the park at the terminus of the Oregon Short Line Railroad, heretofore known as Yellowstone, Montana, was changed in name to West Yellowstone, Montana, by an order from the Postoffice Department. This was found necessary to avoid much confusion of mail service heretofore occasioned by the similarity of name to the postoffice at Mammoth Hot Springs which is known officially as Yellowstone Park, Wyo.

This village was located in the Madison National Forest, and its status has been further changed by Executive Order No. 5123, Dec. 5, 1919, which modified the boundaries of the Madison National Forest to exclude 1 to 1, 1, 1, 13 SW 1/4 and NW 1/4 of Section 34, T 13 S, R 5E, N. 1. W. containing 339.75 acres; reserved 1.03 acres within lot 1 of this tract for administrative use of the United States Forest Service by temporary withdrawal; withdrew from all forms of disposal 89.02 acres, more or less of the same tract pending consummation of its sale to the Oregon Short Line R.R. Company; and reserved for townsite purposes under Section 2800, U. S. C., the balance of the tract.

Indications for an early Spring. Old timers say the indications for an early spring are most excellent. This prediction is based principally on the fact that elk and deer are shedding their horns earlier than usual, and that woodchucks (marmots) were seen on January 21st and again on February 5, indicating that they are out to stay.

#### X. RECEIPTS AND REMITTANCES.

The usual report of monies collected, due and transmitted, together with money orders and checks totaling \$252.80, as called for by forms 10-59 and 10-60, is inclosed. Please acknowledge receipt.

Cordially yours,

CHRISTIAN A. LINDSEY

Incls:

Acting Superintendent.